

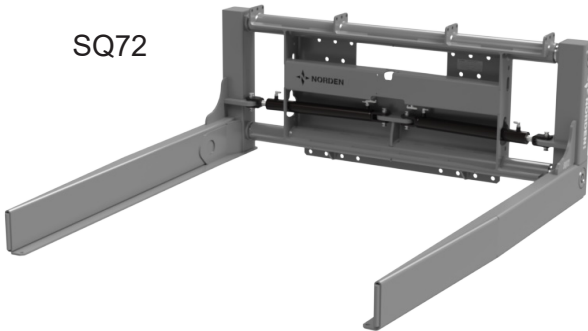


NORDEN MFG

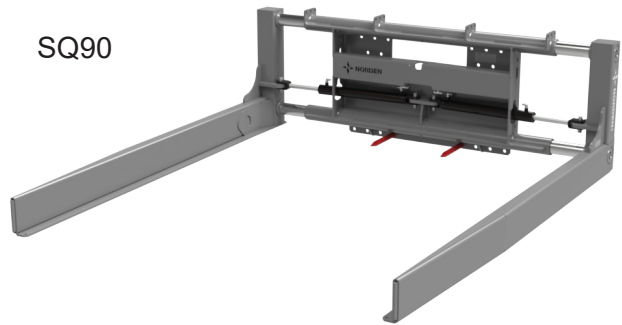
Owner's Manual

Bale Squeeze

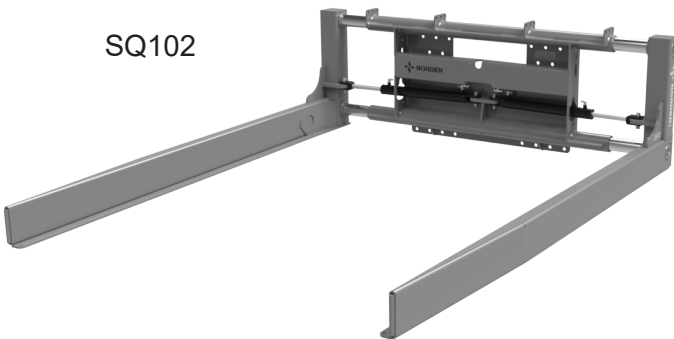
SQ72



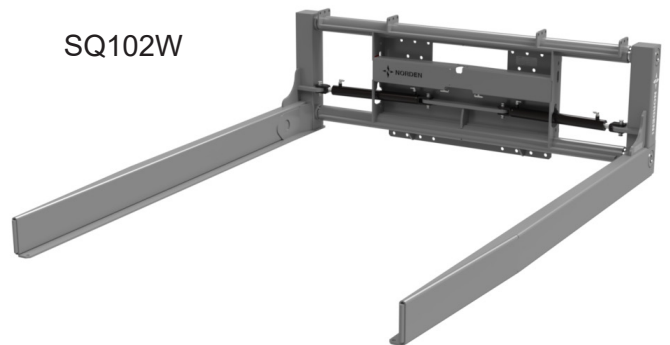
SQ90



SQ102



SQ102W



MADE IN THE USA 

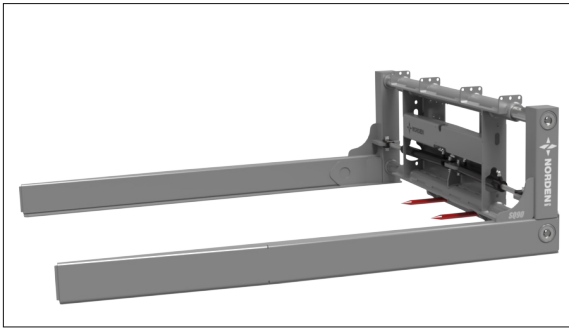
Read, Understand, and Follow the manual. This manual provides information and procedures to safely operate and maintain the Bale Squeeze .



CONTENTS

1. INTRODUCTION	4
1.1Intended Usage	4
1.2Operator Orientation.....	4
1.3Serial Number Location.....	4
1.4Operator Manual Location.....	4
1.5Specifications	5
1.5.1.. SQ72	5
1.5.2.. SQ90	5
1.5.3.. SQ102	5
1.5.4.. SQ102W.....	5
1.5.5.. Backrest Option.....	6
1.6Product Improvements	6
1.7Disposal of Equipment at End of Useful Life...	6
1.8Unanswered Questions	6
2. SAFETY	7
2.1General.....	7
2.2Safety Alert Symbol.....	7
2.3Safety Icons Nomenclature	8
2.3.1.. Prohibited Actions	8
2.4Personal Protection/Important Information.....	8
2.4.1.. Hazard Avoidance	8
2.5General Safety	9
2.6Machine Related Safety	9
2.7Safety Decals	9
2.8Operation Safety	9
2.9Transporting Safety	9
2.10 ..Storage Safety.....	9
2.11 ..Maintenance Safety.....	9
2.12 ..Training	10
2.13 ..Authorization / Training Sign-Off Form	10
3. SAFETY DECALS AND LABELS	11
3.1General Information.....	11
3.2Contact Information.....	11
3.3How to Install Replacement Safety Decals ...	11
3.4Safety Decal Locations.....	12
3.5Safety Decals	12
4. NOMENCLATURE	13
5. OPERATION	14
5.1User Safety.....	14
5.1.1.. Machine Operation Recommendations	14
5.1.2.. Machine Requirements	14
5.2Machine Specifications.....	15
5.3Attaching to Machine.....	15
5.4Pre-Operation Checklist	16
5.5Operation Safety	16
5.5.1.. Picking Up bales	16
5.6Moving the bales	17
5.6.1.. Placing the Bales	18
5.7Detaching From Machine	18
6. TRANSPORTING	19
6.1Highway and Transport Safety	19
6.2Pre-transport Checklist.....	19
7. STORAGE.....	20
7.1Placing in Storage	20
7.2Removing from Storage	20
8. MAINTENANCE	21
8.1Maintenance Safety.....	21
8.2Practice Safe Service Procedures.....	21
8.3Bolt Torque Requirements.....	22
8.4Welding Repairs	22
8.5Service Record	23
9. PARTS SECTION.....	24
9.1Ordering Parts	24
9.2Contact Information	24
9.3Safety Decals and Instructional Labels	24
9.4Backrest Kit, SQ Series Option Available #1033500	24
9.5Bracket Options.....	24
9.5.1.. Skid Steer, #1026200	24
9.5.2.. Euro, #1027580.....	24
9.5.3.. Class II Forklift, #1025730	24
9.5.4.. Class III Forklift, #1027130	25
9.5.5.. Manitou Telehandler, #1032880	25
9.5.6.. CASE 586E, #1034570	25
9.5.7.. JD 244K 324K, #1035120	25
9.5.8.. JLG AG925, #1034120.....	25
9.5.9.. JD 640, #1040140	25
9.5.10 SkyTrak #1039370	25
9.5.11 JCB 50XC #1038780	25
9.5.12 CAT IT #1038420	25
9.6SQ72 Parts Detail.....	26
9.7SQ90 Parts Detail.....	27
9.8SQ102 Parts Detail.....	28
9.9SQ102W Parts Detail	29
9.10 ..Hydraulic Parts Detail.....	30
9.11 ..Backrest Kit, SQ Series Option #1033500	31
10. BLOCK OF BALE PACK DIAGRAMS	32

1. Introduction



The Norden Bale Squeeze is an attachment that mounts to a skid steer loader or a tractor equipped with a loader having similar mounting capabilities. **It is designed specifically to move bales of hay.**

NOTE: The specific term “bale squeeze attachment” will be referred to simply as “squeeze” or attachment throughout the rest of this manual and may refer to any of the models covered by this manual. The term skid steer loader or small utility tractor will be referred to as “machine” throughout this manual.

Read, understand, and follow the manual carefully to become familiar with your new Norden Bale Squeeze. Ultimately it is our desire that you will be operating your squeeze as a seasoned professional in very little time!

This manual is intended for all models, but will show specific pictures and diagrams of the SQ90. If any specifications are different than the model shown, it will be noted.

1.1 Intended Usage

Do not use this squeeze for any other purpose than its intended use of moving bales of hay.

NOTE: Use a machine capable of lifting 7,000 lbs for maximum operating capacity. Do not use squeeze to lift the machine; oversized machines will cause damage to the squeeze. Using the squeeze with a machine that exceeds the specified requirements may cause machine or attachment damage, be a potential danger to the operator or bystanders, and will void any warranty.

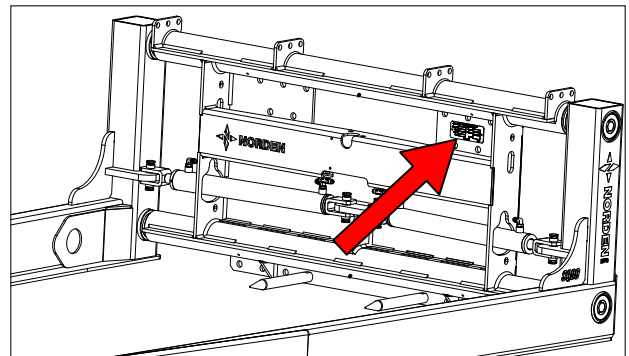
1.2 Operator Orientation

The directions left, right, front, and rear, as mentioned throughout this manual, are as seen from the operator’s seat, facing in the direction of travel.

1.3 Serial Number Location

The Bale Squeeze serial number and model number are on the data plate which is located on the back of the Squeeze Frame. Please use these numbers when requesting service, seeking information, or ordering parts.

NORDEN		4210 Kinsman Rd NW, North Bloomfield, OH 44450 www.nordenmfg.com - (877) 296-5851	
Model Number/Rev		Approx. Weight	
Part Number		Max Hyd. Pressure	
Serial Number		Load Rating	
Mfg Date			
Made in USA		1027460	



Record the serial and model numbers as well as the date of purchase in the space provided for easy reference when contacting Norden Mfg LLC with questions.

Model Number

Serial Number

Date of Purchase

1.4 Operator Manual Location

The manual is placed inside the bucket before shipping. Remove the manual and read. After reading the manual, store in an easily accessible safe place for future reference.

1.5 Specifications

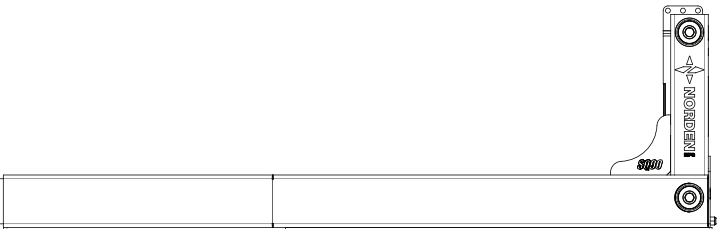
Specifications subject to change without notice.

1.5.1 SQ72



Shipping Dimensions	77" L x 74" W x 29" H
Working Dimensions	71" L x 67.5-103.5" W x 29" H
Approximate Weight	950 lbs.
Inside Length	72" 2 bales long
Group Size	72-90" W x 71-78" L
Maximum Lifting Capacity	4,000 lbs.
Bale Packs	E10 and F8

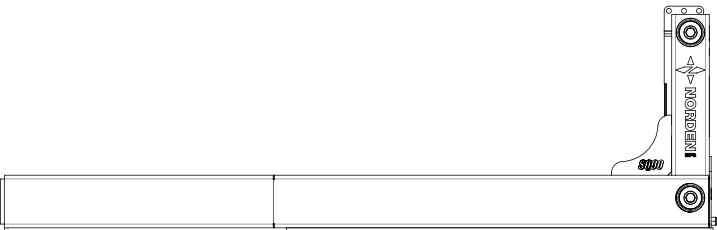
1.5.2 SQ90



Shipping Dimensions	95" L x 74" W x 29" H
Working Dimensions	89" L x 67.5 - 103.5" W x 29" H
Approximate Weight	1,020 lbs.
Inside Length	90" 2 1/2 bales long
Group Size	572-90" W x 89-96" L
Maximum Lifting Capacity	4,000 lbs.
Bale Support	2 Center Section Spears
Bale Packs	F10

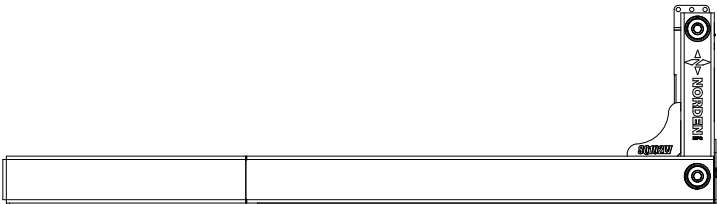
NOTE: AF10 Accumulator releases bale packs with two (2) bales wide and three (3) rows of two (2) bales long. The SQ90 comes equipped with two (2) Center Section Spears to stabilize the two (2) wide bales to avoid bales from dropping down when squeezed.

1.5.3 SQ102



Shipping Dimensions	107" L x 74" W x 29" H
Working Dimensions	101" L x 67.5-103.5" W x 29" H
Approximate Weight	1,060 lbs.
Inside Length	102" 3 bales long
Group Size	72-90" W x 101-108" L
Maximum Lifting Capacity	4,000 lbs.
Bale Packs	F12, F15, E15, E18

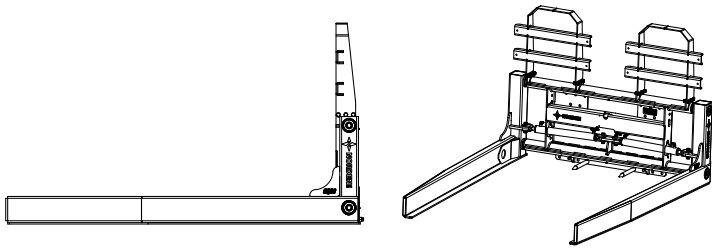
1.5.4 SQ102W



Shipping Dimensions	107" L x 88" W x 29" H
Working Dimensions	101" L x 81.5-117.5" W x 29" H
Approximate Weight	1233 lbs.
Inside Length	102" 3 bales long
Group Size	90" W x 101-108" L
Maximum Lifting Capacity	4,000 lbs.
Bale Packs	F15, E18

NOTE: See "10. Block of Bale Pack Diagrams" on page 32 for Bale Pack Diagrams

1.5.5 Backrest Option



Height with Backrest Option	Additional 23"
Weight with Backrest Option	Additional 93 lbs.

1.6 Product Improvements

Because Norden Mfg LLC maintains an ongoing program of product improvement, we reserve the right to make improvements in design or changes in specifications without incurring any obligation to install them on attachments previously sold.

1.7 Disposal of Equipment at End of Useful Life

The Norden Mfg LLC Bale Squeeze is designed for the specific purpose of moving bales of hay. When this squeeze is no longer capable of performing its intended use, it should be dismantled and scrapped. Do not use any materials or components from this squeeze for any other purpose.

1.8 Unanswered Questions

If you have any questions not answered in this manual, require additional copies, or the manual is damaged, please contact your dealer or:

Norden Mfg LLC
4210 Kinsman Road NW
North Bloomfield, OH 44450

Phone: (877) 296-5851
Fax: (440) 693-4336
E-mail: parts@nordenmfg.com

The manual is also available for download at:
www.nordenmfg.com

2. Safety

2.1 General

Most work-related accidents are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. As you use and maintain the squeeze you must be alert to potential hazards.

Improper use and/or maintenance of this squeeze could cause a dangerous situation that results in property damage, personal injury, or death.

WARNING

 **Do not use the squeeze until you read, understand, and follow the information contained in this manual and all related equipment manuals. Do not use the squeeze for anything other than its intended purpose.**

 **Safety precautions and warnings are provided in this manual and on the squeeze. If these precautions and warnings are not followed, bodily injury or death could occur to you or to other persons.**

Norden Mfg LLC cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the product are, therefore, not all-inclusive. If a method of operation not specifically recommended by us is used, you must satisfy yourself that it is safe for you and for others. You should also ensure that the attachment will not be damaged or be made unsafe by the use or maintenance methods that you choose.

The information, specifications, and illustrations in this manual are based on the information that was available at the time this material was written and can change at any time.

2.2 Safety Alert Symbol



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. The symbol is followed by a signal word such as “WARNING” or “CAUTION” depending on the severity of the potential hazard. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains WARNINGS, CAUTIONS, NOTICES, SAFETY INSTRUCTIONS, and NOTES. Warnings, Cautions, and Safety Instructions must be followed to prevent the possibility of personal injury or death due to improper operation. Notices and Notes help prevent squeeze or property damage.

WARNING

Indicates a potentially hazardous situation which, if not avoided, **COULD** result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, **MAY** result in minor or moderate injury.

NOTICE

Indicates that squeeze or property damage can result if instructions are not followed.

SAFETY INSTRUCTIONS

Indicates specific safety-related instructions or procedures.

NOTE: Contains additional information important to operation or a procedure.

2.3 Safety Icons Nomenclature

This manual and the equipment has numerous safety icons. These safety icons provide important operating instructions which alert you to potential personal injury hazards.

2.3.1 Prohibited Actions

-  Do not alter or modify
-  Do not weld
-  No riders
-  No children
-  No alcohol
-  No drugs

2.4 Personal Protection/ Important Information

-  Read the manual
-  Maintenance procedure
-  Eye protection
-  Hearing protection
-  Hand protection
-  Foot protection
-  First aid kit
-  Fire extinguisher
-  Inspect equipment

-  Use proper tools
-  Place in neutral
-  Weight rating
-  Use OEM parts
-  Use ROPS and seat belt
-  Maintain safety signs
-  Place in park
-  Remove key
-  Stop engine
-  Visibility
-  Check/Maintain fluid levels
-  Set parking brake

2.4.1 Hazard Avoidance

-  Crushing hazard
-  Crushing hazard
-  Slipping hazard
-  Tripping hazard
-  Entanglement hazard
-  Hot surface
-  Fire hazard
-  Safety alert symbol

-  Zero pressure
-  Sharp object hazard
-  Defective or broken part
-  Maintain safe Distance
-  Pinch point hazard
-  Pinch point hazard
-  Pinch point hazard
-  Overturn hazard
-  Tip over hazard
-  Hose damage hazard
-  Explosive separation hazard
-  High pressure fluid hazard
-  Falling hazard

2.5 General Safety

WARNING



Read, Understand, and Follow Manual

To prevent personal injury or even death, be sure you read, understand, and follow all of the instructions in this manual and other related OEM equipment manuals! This squeeze was designed for a specific application; DO NOT modify or use this squeeze for any application other than that for which it was designed. Attachments used improperly or by untrained personnel can be dangerous! Inexperienced operators should receive instruction from someone familiar with the squeeze and the machine before being allowed to use the squeeze.



Do Not Operate

Do not use the attachment if it is in need of repair. If you believe the squeeze has a defect which could cause injury or death, you should immediately stop using the squeeze.



Fall Hazard

Do not use the attachment as a platform for standing. Do not stand on top of the attachment at any time. Do not hang on the attachment or allow others to hang on it.



Pinch Point Hazard

Keep hands and feet away from the attachment to prevent them from getting pinched or crushed.

2.6 Machine Related Safety



Impaired User Hazard

Do not attempt to use or maintain the attachment under the influence of drugs or alcohol. Consult your doctor before using the attachment while taking prescription medications.



Falling Hazard

Do not allow riders on the machine or attachment at any time. Falling can result in severe injuries or death.

WARNING



Stay Clear

Clear the area of people, especially small children, before using the squeeze. Under no circumstances should young children be allowed to work with or around the squeeze.



Not A Lifting Device

Do not use the squeeze to lift other objects.

2.7 Safety Decals

Refer to section “3. Safety Decals and Labels” on page 11 for safety recommendations related to using the squeeze.

2.8 Operation Safety

Refer to section “5.5 Operation Safety” on page 16 for safety recommendations related to using the squeeze. All applicable safety recommendations in other sections should also be followed.

2.9 Transporting Safety

Refer to “6.1 Highway and Transport Safety” on page 19 for safety recommendations related to traveling with a machine and attachment on a public roadway. All applicable safety recommendations in other sections should also be followed.

2.10 Storage Safety

Refer to section “7. Storage” on page 20 for safety recommendations related to storing the squeeze. All applicable safety recommendations in other sections should also be followed.

2.11 Maintenance Safety

Refer to section “8.1 Maintenance Safety” on page 21 for safety recommendations related to maintaining the squeeze. All applicable safety recommendations in other sections should also be followed.

2.12 Training

Norden Mfg LLC follows the general Safety Standards specified by the Farm Equipment Manufacturers Association (F.E.M.A.), and the American National Standards Institute (ANSI). Anyone who will be using and/or maintaining the squeeze must read and clearly understand ALL safety, operation, and maintenance information presented in this manual, other related OEM machine manuals, and the safety decals.

If you do not understand any information in this manual, see your dealer or contact Norden Mfg LLC before proceeding.

Do not use or allow anyone else to use this attachment until all information has been reviewed. Annually review this manual before the season start-up.

Make periodic reviews of SAFETY and OPERATION a standard practice. An untrained operator is not qualified to use this squeeze.

2.13 Authorization / Training Sign-Off Form

The authorization and training sign-off form is provided for your records to show that all personnel who will be working with the squeeze have read and understand the information in this Operator Manual and have been trained in the operation of the machine the attachment is connected to. The user and the owner should both sign and date the form to indicate acceptance of the risk of using the squeeze.

Authorization / Training Sign-Off Form		
Date	User's Signature	Owner's Signature

3. Safety Decals and Labels

3.1 General Information

The types of safety decals (hazard labels) and instructional labels, along with their locations on the squeeze are shown in the following illustrations. Good safety practices require that you familiarize yourself with the various safety decals, the type of warning, and the area or particular operation related to that area that requires your SAFETY AWARENESS.



Think SAFETY!

Work SAFELY!

Pay close attention to the safety decals and instructional labels attached to the machine and squeeze. The safety decals affixed to the attachment are reproduced in this section. If the squeeze is missing a label or one is unreadable, replace the label before using the squeeze.

SAFETY INSTRUCTIONS



Safety Decals and Instructional Labels

1. Keep safety decals or instructional labels clean and legible at all times. Use a clean, damp cloth to clean safety decals.
2. Replace any missing or hard-to-read safety decals or instructional labels.
3. Use care when washing or cleaning the squeeze not to remove or damage the decals. When using a pressure washer to clean the squeeze, avoid spraying too close to decals; high-pressure water can enter through very small scratches or under edges of decals causing them to peel or come off.
4. Locations for the decals and replacement part numbers are shown in this section.
5. Replacement parts must have replacement decals attached before the squeeze is used.
6. Decals are available from your authorized dealer or from Norden Mfg LLC at no charge.

3.2 Contact Information

For replacement decals, contact:

Norden Mfg LLC
4210 Kinsman Road NW
North Bloomfield, OH 44450

Phone: 877-296-5851

Fax: 440-693-4336

E-mail: parts@nordenmfg.com

3.3 How to Install Replacement Safety Decals

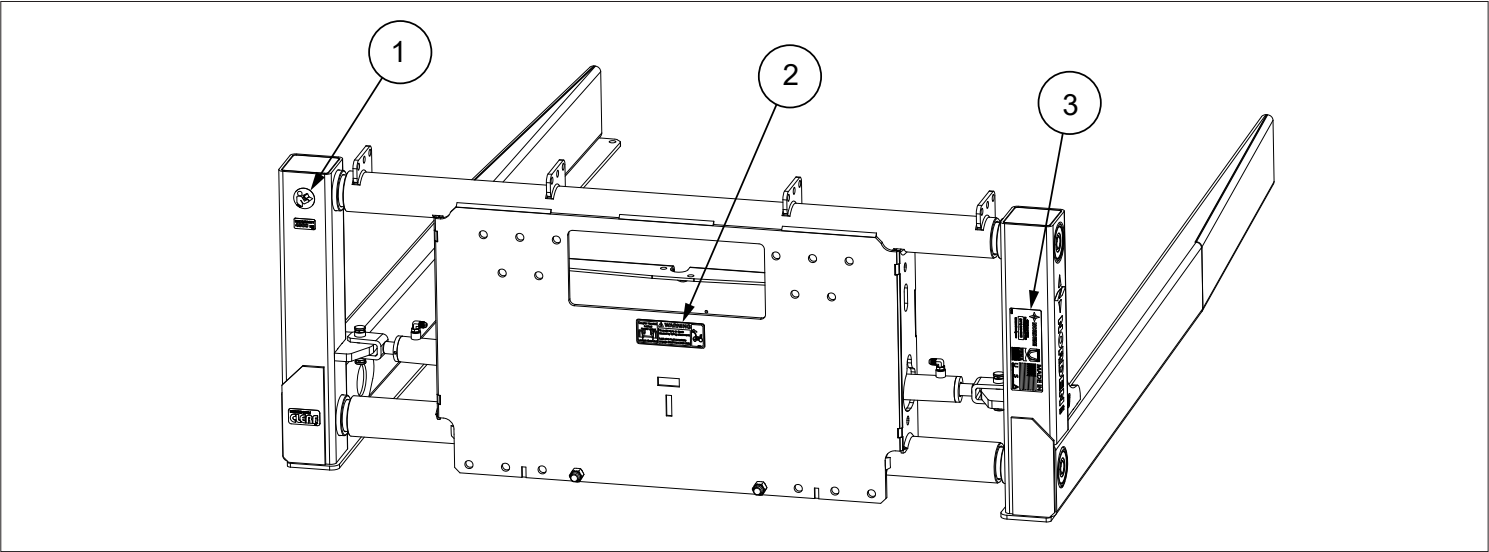
1. Clean and dry the installation area.

NOTE: Do not install the decals if the temperature is below 50°F.

2. Determine the exact position before you remove the backing paper.
3. Remove the backing paper.
4. Align the decal or label over the specified area and carefully press the decal to the part/frame.

NOTE: Small air pockets can be pierced with a pin and smoothed out using the piece of backing paper or a plastic card.

3.4 Safety Decal Locations



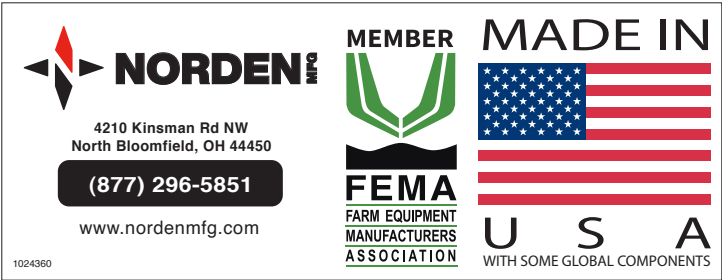
Item	Type	Description	Qty.
1	INFORMATIONAL	Read the Manual	1
2	WARNING	SS Lockpins	1
3	WARNING	Mfg Placard	1

3.5 Safety Decals

1. INFORMATIONAL—1024330 Decal - Read Manual



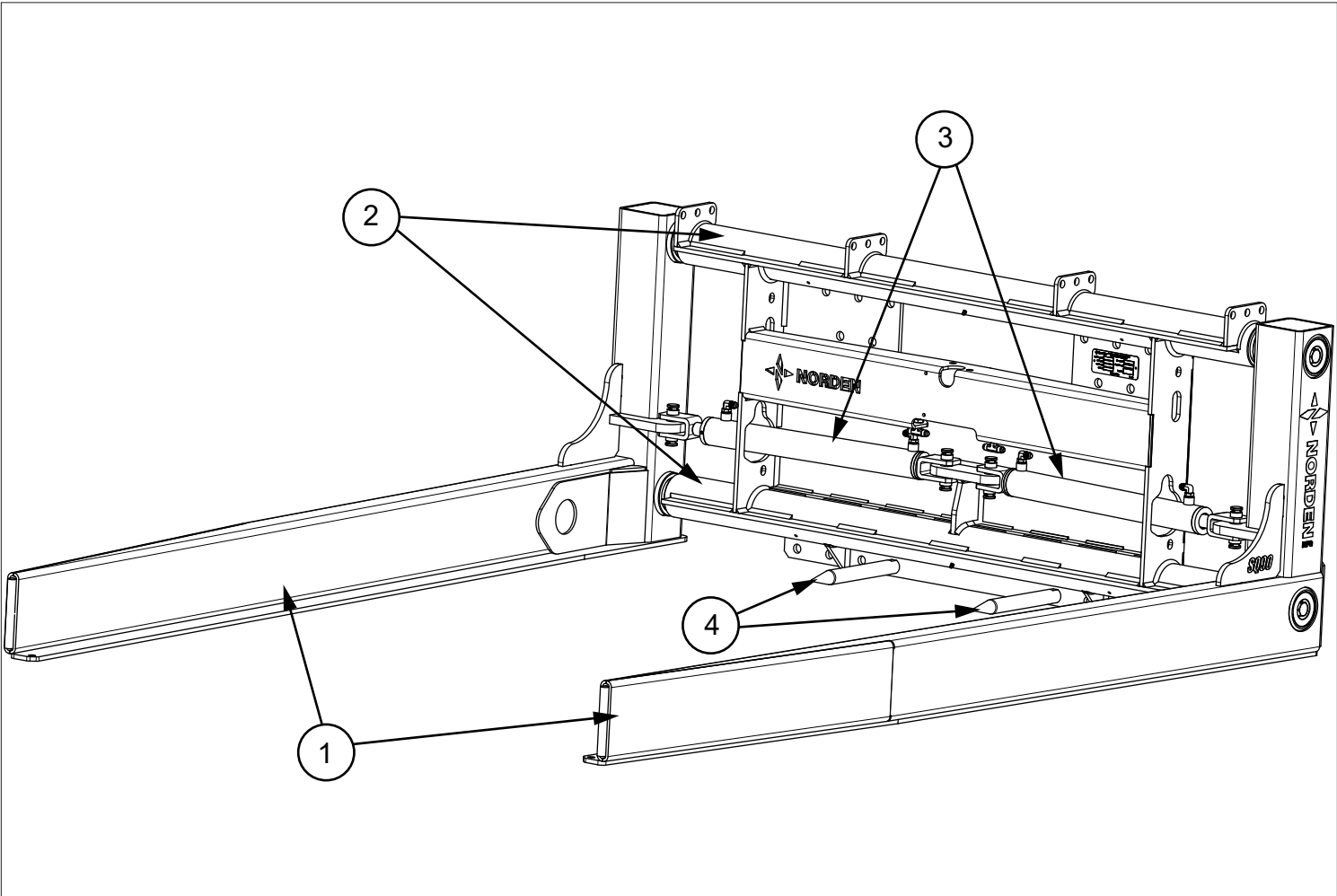
3. INFORMATIONAL—1024360 Decal - Manufacturing



2. WARNING—1027141 Decal - SS Lock Warning



4. Nomenclature



Item	Description
1	Fork Arm
2	Center Frame (weldment)
3	Hydraulic Cylinder
4	Center Section Spears (SQ90 only)

5. Operation

5.1 User Safety

Refer to “2.5 General Safety” on page 9 for additional safety information.

5.1.1 Machine Operation Recommendations

WARNING

   **Machine Operator Manual**
Always read, understand and follow the machine's Operator Manual before using the attachment.

    **Roll Away Hazard**
Before leaving the operator's seat, make sure the engine is stopped, the transmission is placed in park, the key is removed, and the parking brake is set.

 **Rollover Hazard**
The weight of the machine, plus the squeeze, if it rolls onto a person, could cause serious crushing injury or death.

  **Entanglement Hazard**
If using a small compact or utility tractor, keep hands and clothing clear of any rotating parts. Stay clear of the squeeze while the machine is moving.

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit squeeze damage.

 It is the owner's responsibility to make sure any person using a machine with the attachment, especially if it is loaned or rented, has been thoroughly trained on its proper and safe use.

 Be certain only physically-able persons will use the attachment.

 Users who have not read and understood all operating and safety instructions are not qualified to use the attachment.

 If the elderly are assisting with the work, their physical limitations need to be recognized and accommodated.

 Never allow children to use the attachment.

 Be especially observant of the operating area and terrain – watch for loose fill, holes, rocks or other hidden hazards. Always inspect the area prior to operation.

 Be careful at the edge of ditches or gullies. Be careful when working on inclines.

 Do not use excessive speed when moving bales.

 Allow for squeeze length when making turns.

5.1.2 Machine Requirements

SAFETY INSTRUCTIONS

Failure to comply with the following safety instructions could result in serious injury and possibly even death if they are not understood and followed.

   **Machine Operator Manual**
Always refer to the machine's Operator Manual to ensure compatibility and maximum safety.

The machine must be equipped with a universal quick-attach system on a skid steer loader or a tractor front-end loader with compatible quick-attach adapter rated to lift the squeeze which can weigh up to 1,060 pounds plus the weight of the load of bales.

SAFETY INSTRUCTIONS

 Use a machine capable of lifting 7,000 lbs for maximum operating capacity. Do not use squeeze to lift the machine; oversized machines will cause damage to the squeeze.

 Using the squeeze with a machine that exceeds the specified requirements may cause machine or attachment damage, be a potential danger to the operator or bystanders, and will void any warranty.

 Always review the “controls” section of the machine's Operator Manual to be familiar with the location, settings, and function of the controls. Be familiar with all controls before using this attachment.

5.2 Machine Specifications

This section is provided to give the operator general safety information for the machine. Always follow the OEM instructions given in the operator's manual for the machine.

WARNING



Rollover Hazard

To avoid serious injury or death from falling, runover, rollover, or crushing, the machine must have an approved Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt.

- The machine must be equipped with an approved Roll-Over Protective Structure (ROPS) or ROPS cab and seat belt.
- If equipped with a folding ROPS structure, keep it locked in the UP position.
- Only operate the machine when seated in the operator seat.
- Always fasten seat belt whenever the machine is moving.
- If working around dry grass or vegetation, to reduce the risk of fire, do not use a machine with an under-frame exhaust.
- If the machine must travel on a public roadway, follow guidance given in "6. Transporting" on page 19.
- Maintain all manufacturer's safety shields and guards

5.3 Attaching to Machine

WARNING



Pinch Point Hazard

Use caution when connecting the attachment to the machine. Keep hands and feet from under the attachment and clear of pinch points between frame and machine. Do not allow anyone to stand between the machine and squeeze during attachment process.

1. Drive carefully towards the squeeze, making sure the loader coupler is parallel to the attachment plate.
2. Tilt the top of the loader coupler slightly forward in relation to the attachment plate.
3. Guide the top of the loader coupler under the top lip of the attachment plate.

4. Raise and curl the loader coupler until the attachment lifts and the back surface of the attachment rests flat and firmly against the front surface of the coupler.
5. Once the attachment is fully supported, lower the lift arm until the attachment is slightly above the ground surface. Make sure the attachment remains firmly against the loader coupler.
6. If your machine is equipped with hydraulically operated locking pins, activate the coupler lock at this time. In this case; skip Steps 7,8, and 9.
7. If operating a skid steer, turn off the engine, unfasten the seat belt, raise the restraint bar (if equipped), and exit the operator's compartment. If operating a tractor, properly shut down the tractor.

WARNING



Roll Away Hazard

Before leaving the operator's seat, make sure the engine is stopped, the transmission is placed in park, the key is removed, and the parking brake is set.

8. Push the two latch handles down (over center) to lock the lock pins into the retaining tabs on the attachment, securing it to the coupler. Make sure the locking handles are locked into position to prevent the pins from releasing.

WARNING



Injury Hazard

To avoid serious injury or death caused from falling attachment: lock pins must completely engage attachment plate slots.



Crush Hazard

Do not stand under raised attachment.

9. Re-enter the machine and start the engine after re-fastening the seat belt.
10. Raise the attachment and gradually roll it out. If the attachment is not properly secured to the coupler, lower the lift arm and repeat the mounting procedure.
11. Visually inspect the engagement of the lock pins in the attachment's lower tab slots. The lock pins should fully extend through the bottom slots in the attachment hitch plate. Before using the attachment, the operator must operate it through its full range of motion and confirm that the attachment is secure and safe.

5.4 Pre-Operation Checklist

Before each use of the attachment, the following areas should be checked.

Checklist Before Each Use	
☒	Task
☐	Make sure the squeeze is positively attached to the machine. Refer to "5.3 Attaching to Machine" on page 15.
☐	If the machine uses tires, make sure they are inflated properly and the lug nuts are tight.
☐	Inspect the tires of the machine for full operational reliability. Failure of the tires could result in damage to the machine, load, or attachment.
☐	Visually inspect the attachment for any loose bolts, worn parts, or cracked welds. Make necessary repairs before using the attachment.
☐	Make sure the squeeze frame and fork arms are not bent or cracked.
☐	Make sure the operating area is clear, especially of children and animals.

5.5 Operation Safety

Before using the attachment, the operator must have a complete understanding of how to operate the machine including all controls, and how to use the attachment.

The operator should read and understand the Safety and Operation sections of the machine Operator's Manual. It is important to note that these manuals must be read and explained to any operator who cannot read. It is crucial to never allow anyone to operate the machine or use the attachment without complete operating instructions.

To ensure safety to the operator, bystanders, and equipment, the operator must become familiar with the surrounding work area and any obstacles and hazards contained within before starting any operation. Special attention should be paid to foreign debris, rough terrain, steep slopes, bystanders, or animals in the area.

If the operator is not already familiar with the process, it is recommended to practice lifting, lowering, maneuvering, and placing the squeeze on a level site until the confidence and skill needed to safely move bales is achieved. It is important to follow the safety operating procedures that are spelled out in this Operator's Manual.

WARNING

Failure to comply with the following safety instructions could result in serious injury and possibly even death if they are not understood and followed.



Crush Hazard

When handling bales, improper use of the machine can result in serious injury or death to the machine operator. This could be caused by the bales falling or rolling backwards into the operator's station. Therefore, it is important to handle bales safely.

CAUTION

Failure to comply to these safety instructions may result in minor or moderate injury.



Tip Over Hazard

It is important not to exceed lift capacity of the machine. The operator should not lift the squeeze too high, creating an unstable and unsafe situation. The operator should also avoid tilting the squeeze too far forward, setting up a situation that could cause the bales to prematurely fall off.

The operator must travel at a safe speed for ground conditions. Travel slowly over rough ground or when making turns. Working on or around slippery or sloped areas could cause the operator to lose control of the machine.

The operator must not allow bystanders, pets, or livestock to approach the danger zone of the working area.

The operator must not leave the machine with the attachment raised off the ground.

5.5.1 Picking Up bales

1. Verify that the load does not exceed the smaller of the two lift capacities:
 - Rated lift capacity of the squeeze. 83% of the rated lift capacity of the machine.

NOTE: Using 83% of the rated lift capacity accounts for increased loader stresses caused by the extended fork arms and ensures proper tire rating.

NOTICE

Care must be taken to ensure there is enough overhead clearance and no potential hazards or obstructions that could interfere with the lifting and placing of the bales.

2. Position the forks on the outside of bottom layer of bales. Be sure bales are against frame of squeeze to optimize stability while transporting. Refer to "Helpful Tips when using" on page 32 for Helpful Tips When Using the Norden Squeeze.

SAFETY INSTRUCTIONS

Transport bales at a height that maintains a clear line of sight and keep the bales low to the ground when possible to enhance stability.

3. Check for any overhead obstructions.
4. Bring the machine to a complete stop before adjusting the forks to the correct height.
5. Drive forward as far as possible into the bales.
6. Lift the bales just off the location it was and tilt it back slightly.
7. Confirm that the bales are balanced and securely positioned.

NOTICE

Potential Damage. *Partial engagement of the fork arms can damage the fork arms, as it locates the weight of the bales on the outer end of the fork arms.*

8. Verify that no animals or bystanders are behind you and that it is safe to reverse.
9. Slowly reverse to clear storage racks or other obstacles.
10. Position the squeeze at a safe traveling height before moving. It is recommended to keep it two to four inches above the ground.

NOTE: To minimize jerking, stop and start the loader gradually when lowering or lifting loads.

NOTICE

No Chains. *Do not attach chains intended for lifting or securing loads to the squeeze frame, as it may cause damage.*

SAFETY INSTRUCTIONS

For tractor operators only. Always ensure the tractor is properly ballasted before attempting to lift any load with the attachment.

5.6 Moving the bales

1. Always yield to pedestrians.
2. Transport bales fully against the squeeze frame.
3. Tilt the squeeze back slightly.
4. Keep the forks low, preferably two to four inches above the floor.
5. Continuously scan all sides for bystanders or other traffic.

SAFETY INSTRUCTIONS

Make sure that the work area is clear of children, animals, and other obstacles before using the attachment. This is particularly important in areas with higher noise levels or quiet cabs, as you may not hear people shouting.

6. If the bales obstruct your view, travel in reverse.
7. Maintain a safe and controlled speed, reduce speed when turning, and avoid sudden braking.
8. Provide adequate clearance while turning to avoid contact between the fork arms, bales, and obstacles such as storage racks, buildings, trees, or fences.
9. When traveling over ramps or inclines, keep the bales on the "uphill" side of the machine.
10. Whenever possible, travel straight on grades, ramps, and inclines, avoiding turns.
11. Only raise or lower the bales when the machine is stopped, not during travel.
12. Reduce speed when traveling over rough or hilly terrain.
13. Do not transport bales on public roadways.
14. If using public roadways, ensure safe transportation to allow faster vehicles to pass.
15. Plan your route to avoid heavy traffic.
16. Keep equipment away from electrical power lines and place orange warning signs under overhead electrical power lines to indicate the danger.

5.6.1 Placing the Bales

1. Bring the machine to a stop in front of the desired location for bale placement.
2. Gradually raise the bales to the required height.
3. Move the machine forward slowly with the bales raised until it is positioned squarely and directly above the final destination.
4. Level the bales for proper placement.
5. Slowly lower the bales onto its final resting location.
6. Release fork arms. Check all sides for bystanders or other traffic.
7. After the bales have settled, slowly back up.
8. Ensure that the forks clear the bales before making any turns or adjusting the fork height.
9. Lower the forks before resuming movement.

5.7 Detaching From Machine

CAUTION



Pinch / Crush Hazard

Use caution when disconnecting the attachment from the machine. Keep hands and feet from under the attachment and clear of pinch points. Do not allow anyone to stand near the machine or attachment when disconnecting.

1. Move the machine onto a flat, level, solid surface. Lower the squeeze slightly above the surface with the hitch angled, front of the squeeze slightly higher than the rear.
2. If your machine is equipped with hydraulically operated locking pins, retract the coupler lock at this time; in this case, skip Steps 3, 4, and 5.
3. Shut down the machine properly without lowering the attachment.

WARNING



Unintended Movement

Before leaving the operator's seat, make sure the engine is stopped, the transmission is placed in park, the key is removed, and the parking brake is set.

4. To unhook the squeeze, pull up the lock handles to remove the pins from the bottom slots in the hitch plate.
5. Return to the machine and restart the engine.
6. Tilt the top of the hitch plate slightly forward toward the squeeze.
7. Slowly lower the squeeze to the ground, allowing the top lip and loader hitch to separate.
8. Gradually reverse the machine, ensuring that the loader hitch does not interfere with the squeeze.

6. Transporting

6.1 Highway and Transport Safety

This section is provided to give the operator general safety information for the machine. Always follow the OEM instructions given in the operator's manual for the machine.

Refer to "2.5 General Safety" on page 9 for additional safety information.

SAFETY INSTRUCTIONS

SI Make sure the machine is in good operating condition according to the OEM user's manual.

SI  When traveling the attachment on the main roadway, make sure the machine has a clearly visible "Slow Moving Vehicle" placard.

SI Use approved accessory lighting, flags, or other necessary warning devices to protect operators of other vehicles on the roadway during daylight and nighttime transport. Various safety lights and devices are available from the OEM of your machine.

SI Do not allow anyone to ride on the machine or the squeeze.

SI Always drive at a safe speed relative to conditions, and ensure that the speed is low enough for an emergency stop. Keep speed to a minimum.

SI Reduce speed prior to turns to avoid the risk of overturning.

SI Always keep the machine in gear to provide engine braking when going downhill. Do not coast.

SI Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc. Plan your route to avoid heavy traffic.

SI Travel on roadways in such a way that faster moving vehicles can pass safely.

SI Always travel with the attachment in a position to provide maximum visibility at all times. Make allowances for increased length and weight of the squeeze when making turns, stopping, etc.

6.2 Pre-transport Checklist

1. Before transporting, make sure the maintenance on the machine is current.
2. If applicable, check the tire pressures on the machine, and correct if necessary.
3. Make sure the attachment is securely attached to the machine. Always inspect the fork arms and frame for damage or abnormal wear before attaching.
4. Prior to traveling on a public road, have an observer confirm all running lights, brake lights, turn signals, and hazard lights are working on the machine.
5. Verify the brakes are operating correctly.

7. Storage

Refer to “2.5 General Safety” on page 9 for additional safety information.



Stay Clear

Do not permit anyone, especially children to play on or around the stored squeeze. Store the squeeze in an area away from human activity.

SAFETY INSTRUCTIONS



Do not store the squeeze where it will be exposed to livestock. Damage and livestock injury could result.

7.1 Placing in Storage

1. Thoroughly wash the attachment with a pressure washer or water hose to remove all loose dirt, mud, or debris.
2. Select an area that is dry, level, and free of debris (inside a building is ideal). Move the squeeze to its storage area.
3. Follow instructions in “5.7 Detaching From Machine” on page 18.

7.2 Removing from Storage

1. Attach the squeeze to the machine following the procedure in section “5.3 Attaching to Machine” on page 15.
2. Before placing the squeeze back into service, replace any worn or defective parts and perform the “5.4 Pre-Operation Checklist” on page 16.

8. Maintenance

Good maintenance is the owner's and operator's responsibility. Poor maintenance shortens the squeeze life and is an invitation for problems.

Norden Mfg LLC will not claim responsibility for use of unapproved parts and/or accessories and other damages as a result of their use.

If the attachment has been altered in any way from its original design, Norden Mfg LLC will not accept any liability for injury or warranty.

8.1 Maintenance Safety

WARNING



Unintended Movement

If the attachment is attached to a machine, make sure the engine is stopped, the transmission is placed in park, the key is removed, and the parking brake is set.



Personal Protection Equipment

Wear personal protection equipment (PPE), which may include safety glasses, safety shoes, gloves, etc. appropriate for the work site and working conditions.



No Unauthorized Modifications

Do not modify the attachment or safety devices. Unauthorized modifications may impair the function of the attachment, or create safety hazards, and will void the warranty. If the squeeze has been altered in any way from the original design, Norden Mfg LLC does not accept any liability for injury or warranty.



Damaged Parts Hazard

Do not use the attachment if any parts are damaged. If the squeeze is believed to have a defect which could cause it to work improperly, immediately stop using it and remedy the problem before continuing.



Unintended Consequences

Do not weld on the squeeze frame or fork arm. Doing so will cause a stress point which will result in failure of the part.

WARNING



Crush Hazard

Always set the squeeze on blocks or on the ground when performing maintenance.



Good Working Condition

Keep all parts in good working condition and properly installed. Fix damage immediately. Replace worn or broken parts.



OEM Replacement Parts

If replacement parts are necessary, genuine factory replacement parts must be used to restore the attachment to its original specifications. Unapproved parts could create a safety hazard. Norden Mfg LLC will not accept responsibility for damages as a result of the use of unapproved parts.

8.2 Practice Safe Service Procedures

CAUTION



Understand service procedures before doing any work. Keep the work area clean and dry.



Keep all parts in good working condition and properly installed. Replace worn or broken parts immediately.



A first aid kit should be readily accessible while performing maintenance on the squeeze.



Do not leave tools lying around the work area. Follow good shop practices. Keep service area clean and dry. Be sure electrical outlets and tools are properly grounded. Use adequate light. After servicing, be sure all tools, parts and service equipment are removed.



Use the correct tools, jacks, hoists, or other components that have the capacity for the job.

8.3 Bolt Torque Requirements

WARNING



Equipment Failure

The proper torque value for bolts and cap screws is identified by their head markings. Replacing higher “grade” bolts (Grade 5) with lower grade bolts will lead to equipment failure and could result in injury or death. Always use replacement bolts with the same grade markings as the removed bolt.

It is extremely important to apply and maintain proper torque on all bolts. Use a torque wrench to assure the proper amount of torque is being applied to the fastener.

Start all bolts or nuts by hand to prevent cross-threading.

Torque figures indicated in the chart are used for non-greased or non-oiled threads unless otherwise specified. Therefore, do not grease or oil bolts or cap screws unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

The chart gives correct torque values for various bolts and cap screws. Tighten all bolts to the torque specified in the chart unless otherwise noted. Check tightness of bolts periodically, using the bolt torque chart as a guide. Always replace hardware with the same grade bolt.

8.4 Welding Repairs



Before performing any type of welding repair to the attachment frame, contact Norden Mfg LLC for approval. Repair welding must be done with care and with procedures that may be beyond the capabilities of the ordinary welder.

WARNING



Personal Injury Hazard

Repairs or modifications to the attachment could result in serious injury or death to the operator or bystander should these repairs fail. Do not weld or repair fork arm. If damaged, replace fork arms with new OEM parts.

NOTICE

Anyone performing a welding repair should be certified in accordance to the American Welding Society (AWS) standards.

Bolt Diameter	English Bolt Torque Specifications					
	Grade 5		Grade 8		ASTM A574	
	ft.lbs.	N·m	ft.lbs.	N·m	ft.lbs.	N·m
1/4"	9	12	12	17	14	18
5/16"	19	25	27	36	29	38
3/8"	33	45	45	63	51	69
7/16"	53	72	75	100	81	109
1/2"	80	110	115	155	124	168
9/16"	115	155	165	220		
5/8"	158	215	220	305	238	322
3/4"	290	390	398	540	423	573
7/8"	420	570	650	880	682	924
1"	630	850	970	1320	1022	1385

8.5 Service Record

The service period recommended is based on normal operating conditions. Severe or unusual conditions may require more frequent service.

Copy this page to continue record.

Hours and Serviced By Maintenance													
Every 8 Hours of Use													
Visually inspect the fork arms for hairline cracks.													
Annually													
Make sure all fasteners are tightened to proper torque. Refer to "8.3 Bolt Torque Requirements" on page 22.													
Inspect and replace damaged safety decals or instructional labels.													
Wash the squeeze.													
Inspect attachment frame for cracking or damage.													

9. Parts Section

9.1 Ordering Parts

Norden Mfg LLC manufactures a quality product that requires very little maintenance or repair. However, should a part break or become damaged, our knowledgeable staff can make sure you receive the part(s) to put your squeeze back into operation.

9.2 Contact Information

For replacement decals, questions, or to order parts, contact:

Norden Mfg LLC
4210 Kinsman Road NW
North Bloomfield, OH 44450

Phone: 877-296-5851
Fax: 440-693-4336
E-mail: parts@nordenmfg.com

9.3 Safety Decals and Instructional Labels

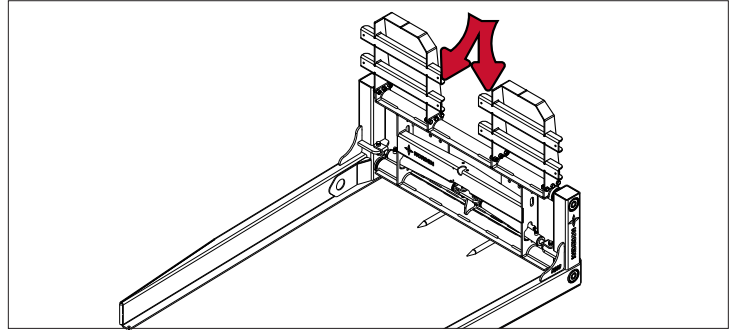
Safety decals and instructional labels provide a vital role in helping to reduce injuries and/or possibly even death. To ensure the greatest level of safety, all decals must be in place and legible or all warranties are void. Remember, it is the user's responsibility to maintain these decals and labels.

WARNING



To prevent serious injury or death which could result from not following posted safety instructions, make sure all decals are attached to any replacement part.

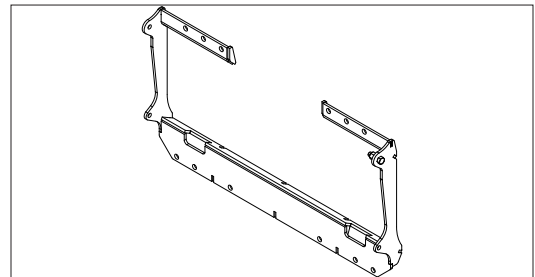
9.4 Backrest Kit, SQ Series Option Available #1033500



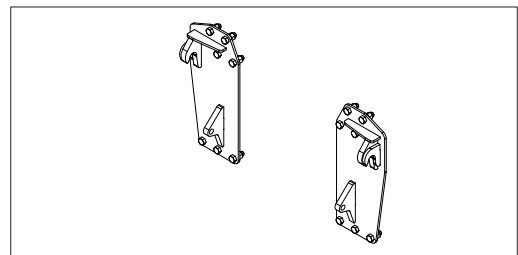
Backrest increases the interface, to help push blocks of hay packs into the van trailer.

9.5 Bracket Options

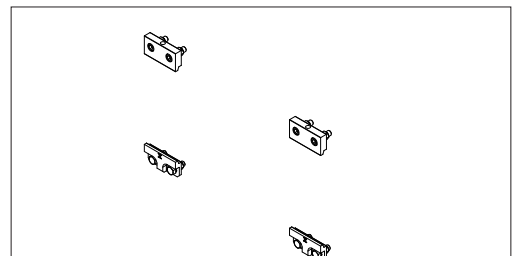
9.5.1 Skid Steer, #1026200



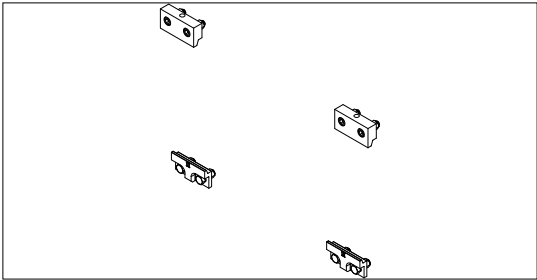
9.5.2 Euro, #1027580



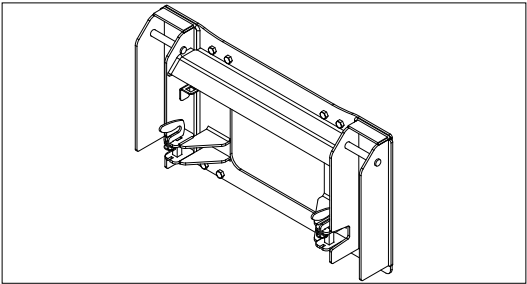
9.5.3 Class II Forklift, #1025730



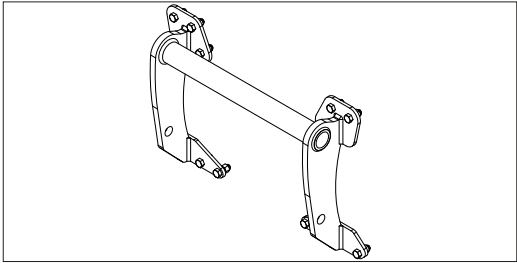
9.5.4 Class III Forklift, #1027130



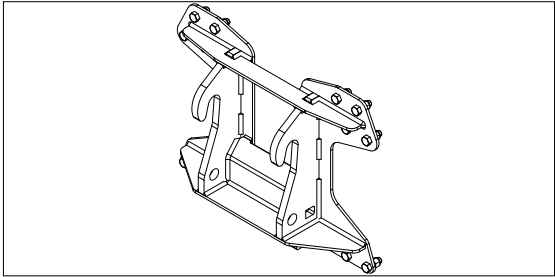
9.5.9 JD 640, #1040140



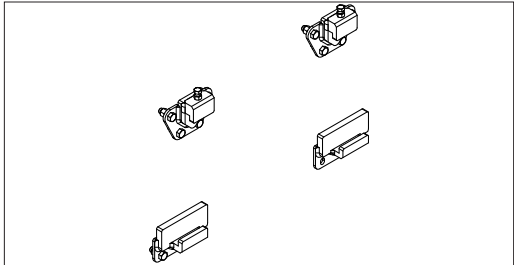
9.5.5 Manitou Telehandler, #1032880



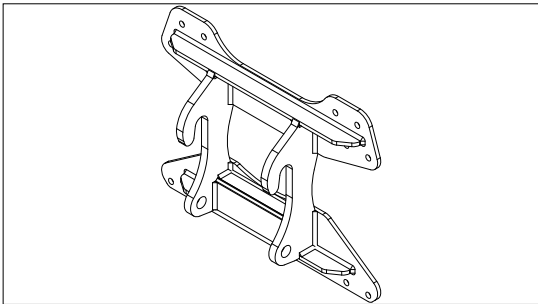
9.5.10 SkyTrak #1039370



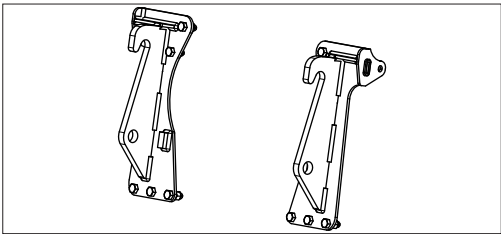
9.5.6 CASE 586E, #1034570



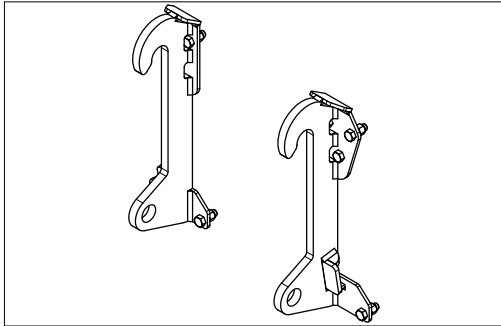
9.5.11 JCB 50XC #1038780



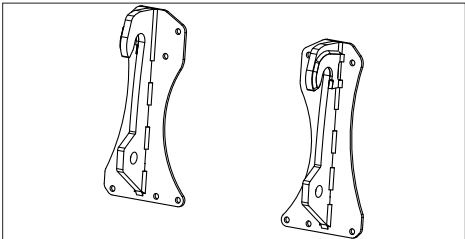
9.5.7 JD 244K 324K, #1035120



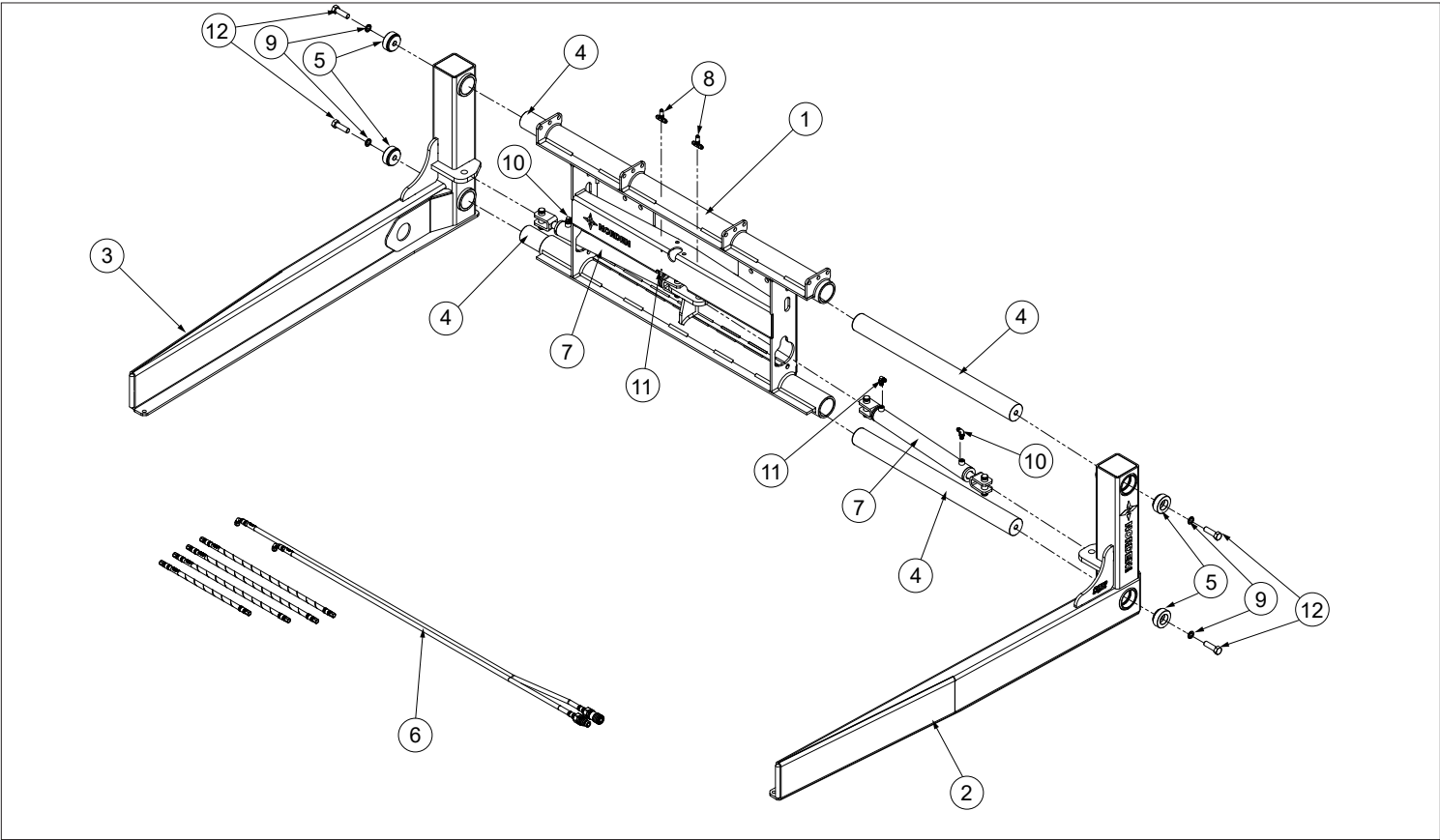
9.5.12 CAT IT #1038420



9.5.8 JLG AG925, #1034120

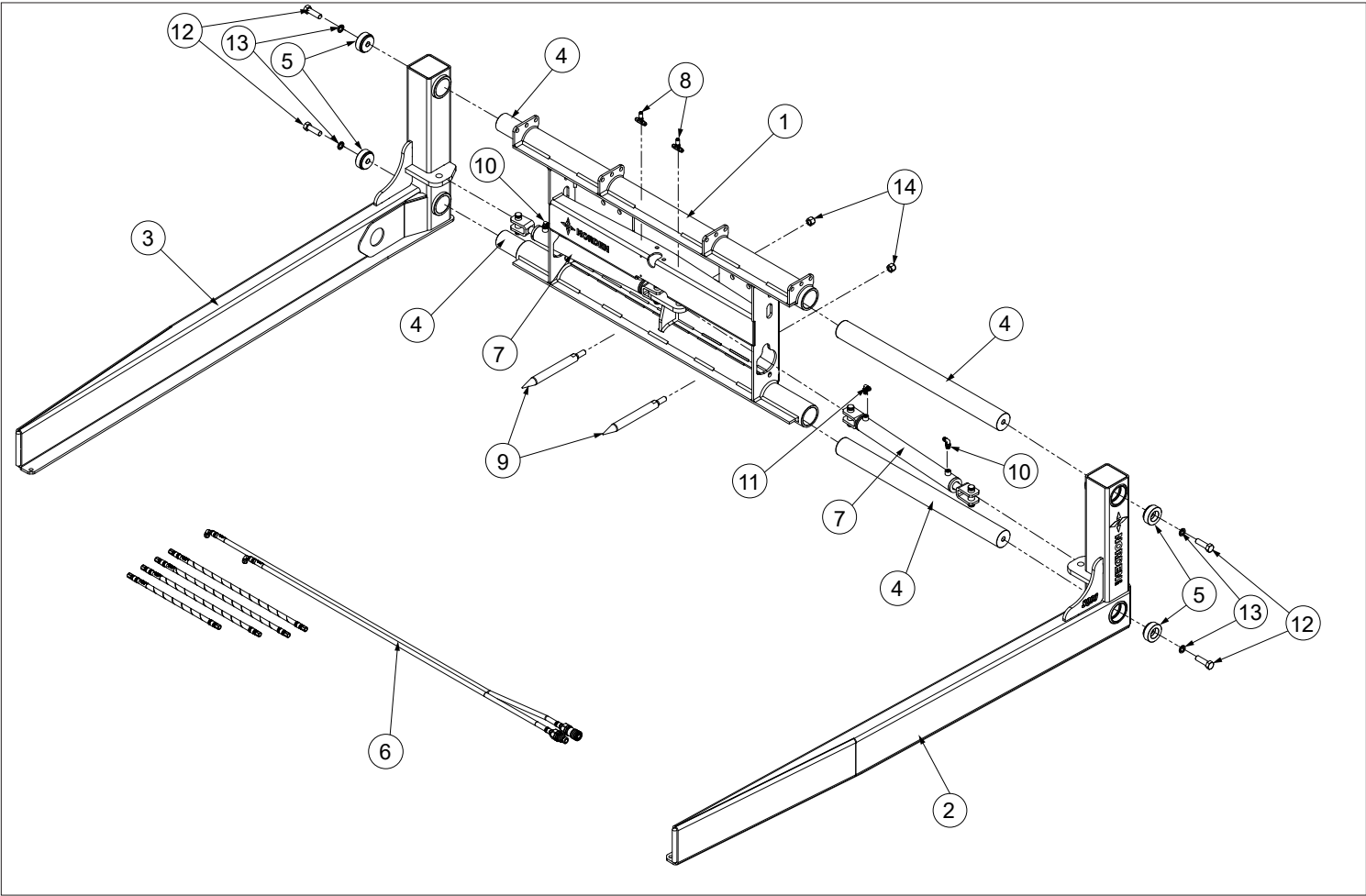


9.6 SQ72 Parts Detail



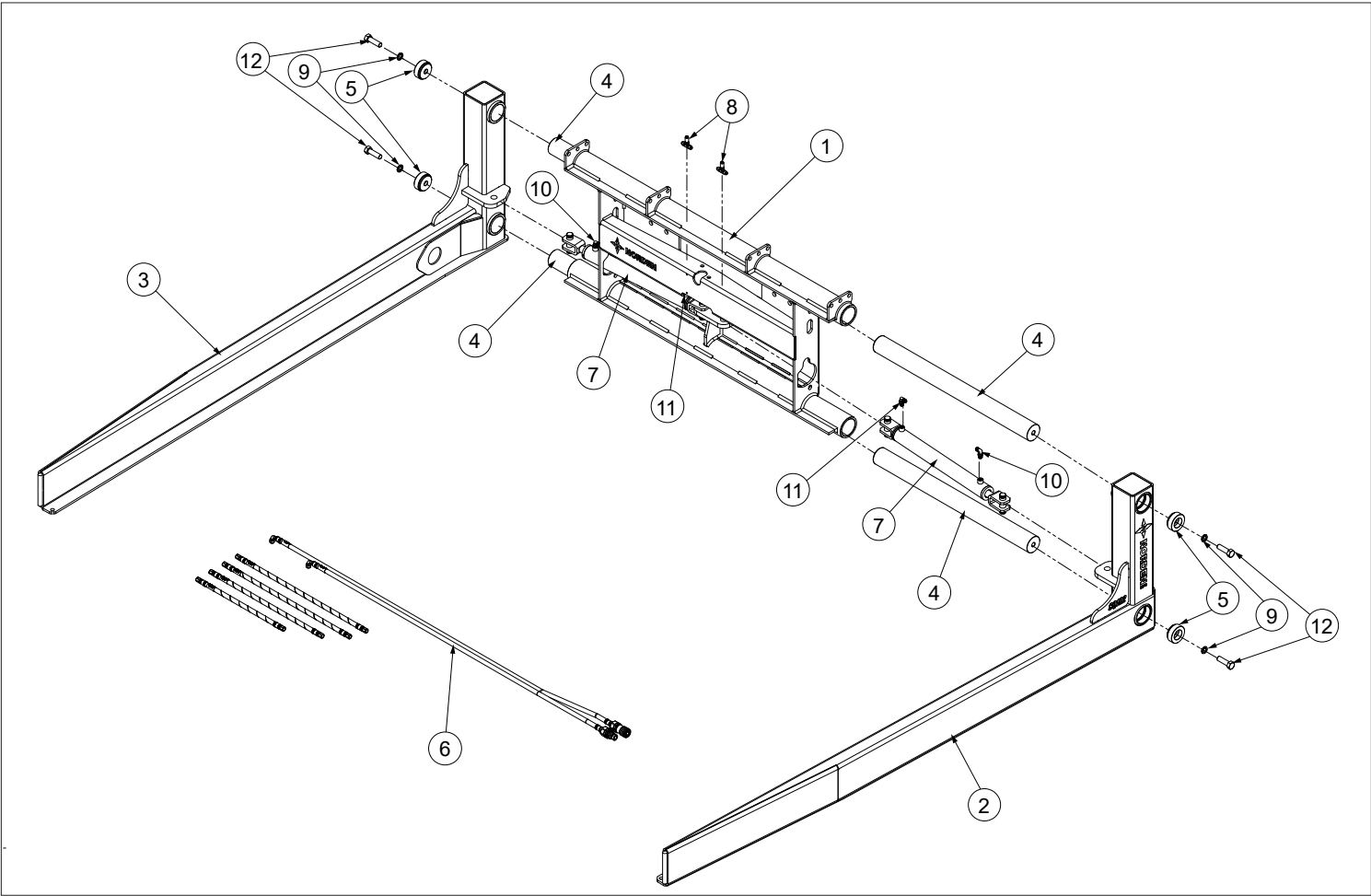
Item	Part number	Description	Quantity
1	1027060	Center Frame Weldment	1
2	1027300	LH Fork Weldment, 72	1
3	1027310	RH Fork Weldment, 72	1
4	1027080	Shaft, SQ Series	4
5	1027120	Shaft Retainer	4
6	1027840	SQ-Series Hose Set	1
7	1026790	2x18 Hydraulic Cylinder w/ Clevis Ends	2
8	1026880	6MJ Bulkhead Branch Tee	2
9	1026540	Regular Spring Lock Washer 3/4"	4
10	1009690	6MJ-6MB90 Adapter	2
11	1026870	6MJ-6MB90 Orifice Adapter, 0.062"	2
12	1027860	Hex bolt 3/4"-16 x 2.5"	4

9.7 SQ90 Parts Detail



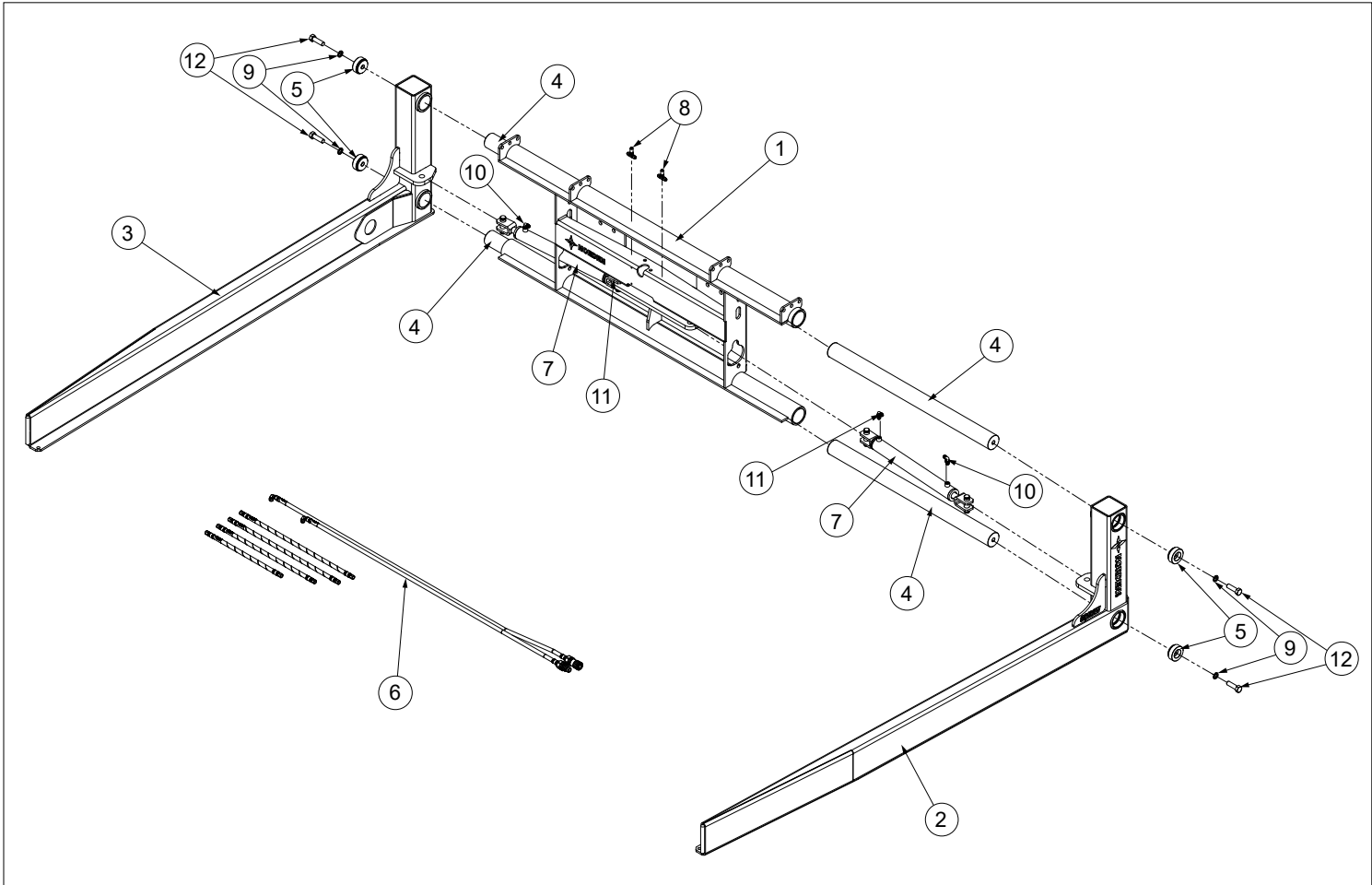
Item	Part number	Description	Quantity
1	1027060	Center Frame Weldment	1
2	1027320	LH Fork Weldment, 90	1
3	1027330	RH Fork Weldment, 90	1
4	1027080	Shaft, SQ Series	4
5	1027120	Shaft Retainer	4
6	1027840	SQ-Series Hose Set	1
7	1026790	2x18 Hydraulic Cylinder w/ Clevis Ends	2
8	1026880	6MJ Bulkhead Branch Tee	2
9	1027850	Center Section Spear	2
10	1009690	6MJ-6MB90 Adapter	2
11	1026870	6MJ-6MB90 Orifice Adapter, 0.062"	2
12	1027860	Hex bolt 3/4"-16 x 2.5"	4
13	1026540	Regular Spring Lock Washer 3/4"	4
14	1027880	3/4"-16 Grade 8 Nylock Nut	2

9.8 SQ102 Parts Detail



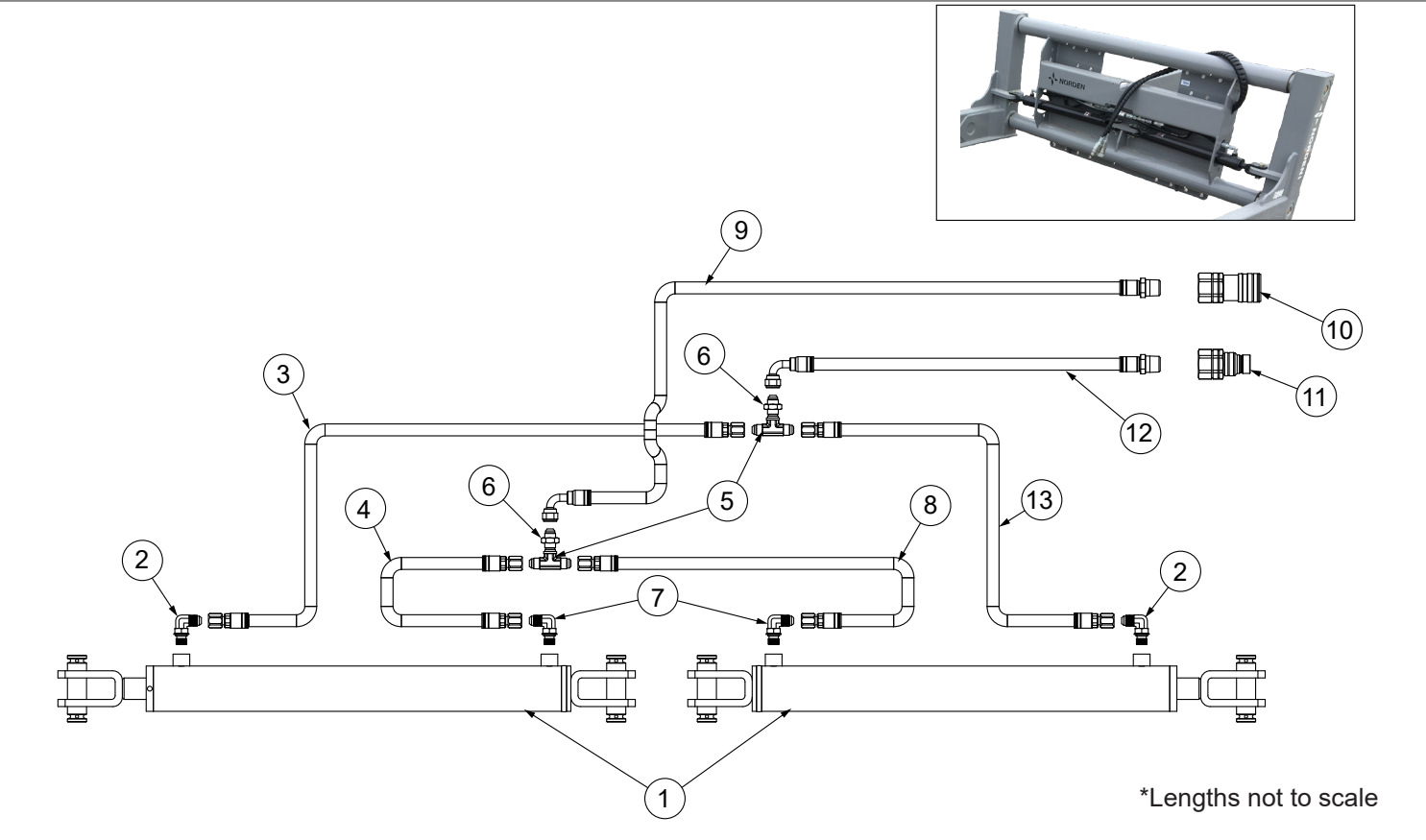
Item	Part number	Description	Quantity
1	1027060	Center Frame Weldment	1
2	1027340	LH Fork Weldment, 102	1
3	1027350	RH Fork Weldment, 102	1
4	1027080	Shaft, SQ Series	4
5	1027120	Shaft Retainer	4
6	1027840	SQ-Series Hose Set	1
7	1026790	2x18 Hydraulic Cylinder w/ Clevis Ends	2
8	1026880	6MJ Bulkhead Branch Tee	2
9	1026540	Regular Spring Lock Washer 3/4"	4
10	1009690	6MJ-6MB90 Adapter	2
11	1026870	6MJ-6MB90 Orifice Adapter, 0.062"	2
12	1027860	Hex bolt 3/4"-16 x 2.5"	4

9.9 SQ102W Parts Detail



Item	Part number	Description	Quantity
1	1038840	Center Frame Weldment Wide	1
2	1027340	LH Fork Weldment, 102	1
3	1027350	RH Fork Weldment, 102	1
4	1038800	Shaft, SQ Series Wide	4
5	1027120	Shaft Retainer	4
6	1041940	SQW-Series Hose Set	1
7	1026790	2x18 Hydraulic Cylinder w/ Clevis Ends	2
8	1026880	6MJ Bulkhead Branch Tee	2
9	1026540	Regular Spring Lock Washer 3/4"	4
10	1009690	6MJ-6MB90 Adapter	2
11	1026870	6MJ-6MB90 Orifice Adapter, 0.062"	2
12	1027860	Hex bolt 3/4"-16 x 2.5"	4

9.10 Hydraulic Parts Detail



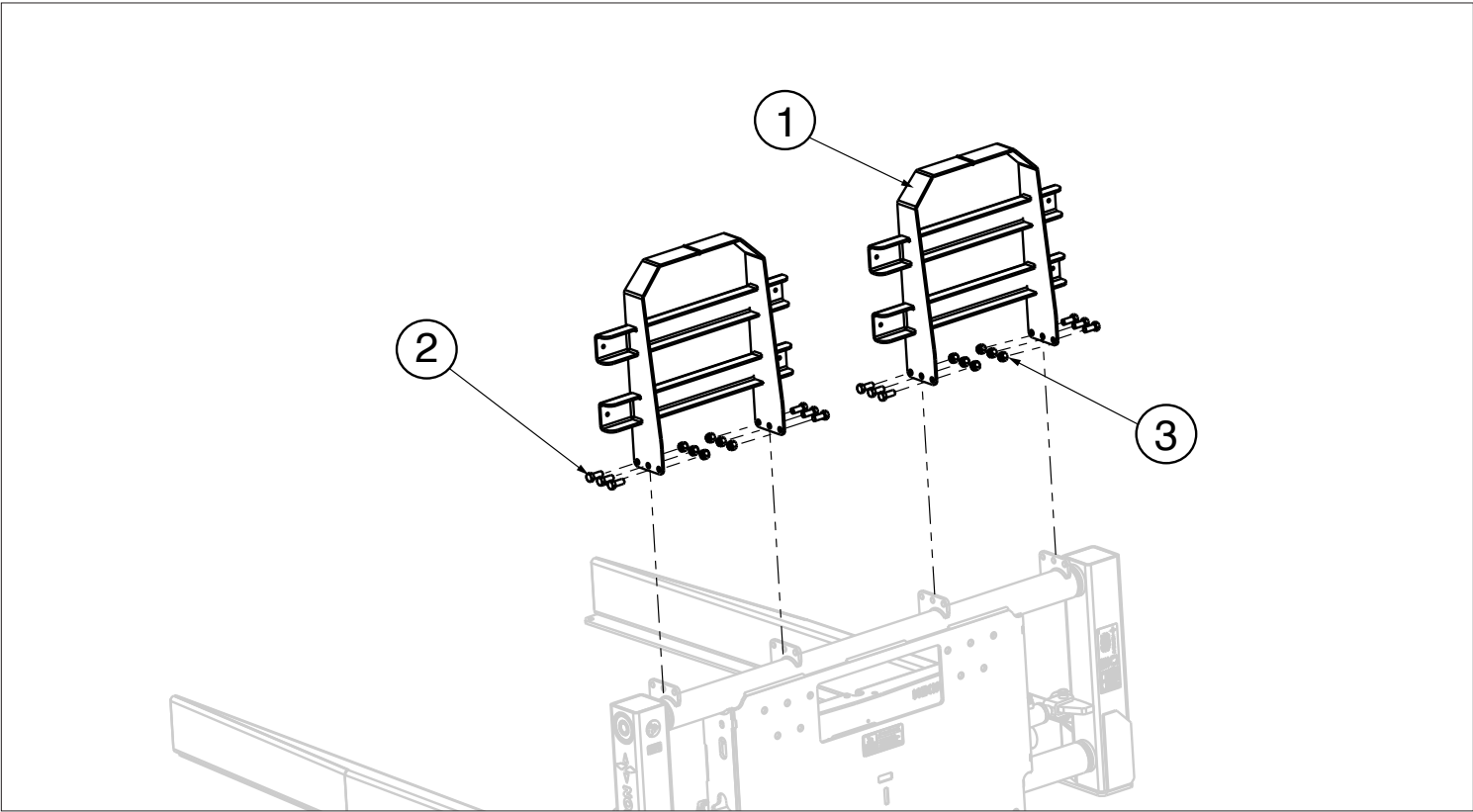
Item	Part number	Description	Qty for SQ72, SQ90, SQ102	Qty for SQ102W
1	1026790	2x18 Hydraulic Cylinder w/ Clevis Ends	2	2
2	1009690	6MJ-6MB90 Adapter	2	2
3	1027710	Bale Squeeze Cylinder Hose, RH Rod	1	0
	1041960	Bale Squeeze Cylinder Hose, RH Rod - Wide Mode	0	1
4	1027730	Bale Squeeze Cylinder Hose, RH Base	1	1
5	1026880	6MJ Bulkhead Branch Tee	2	2
6	1026890	Bulkhead Lock Nut, 3/8" (9/16"-18)	2	2
7	1026870	6MJ-6MB90 Orifice Adapter, 0.062"	2	2
8	1027720	Bale Squeeze Cylinder Hose, LH Base	1	1
9	1027750	Bale Squeeze Loader Hose, RH Tee	1	1
10	1017120	Skid Steer End, Female	1	1
11	1017110	Skid Steer End, Male	1	1
12	1027760	Bale Squeeze Loader Hose, LH Tee	1	1
13	1027700	Bale Squeeze Cylinder Hose, LH Rod	1	0
	1041950	Bale Squeeze Cylinder Hose, LH Rod - Wide Mode	0	1

For entire hose kit replacement, use PN-1027840 SQ-Series Hose Set

1041940 SQW-Series Hose Set

Refer to “9. Parts Section” on page 24 for ordering information.

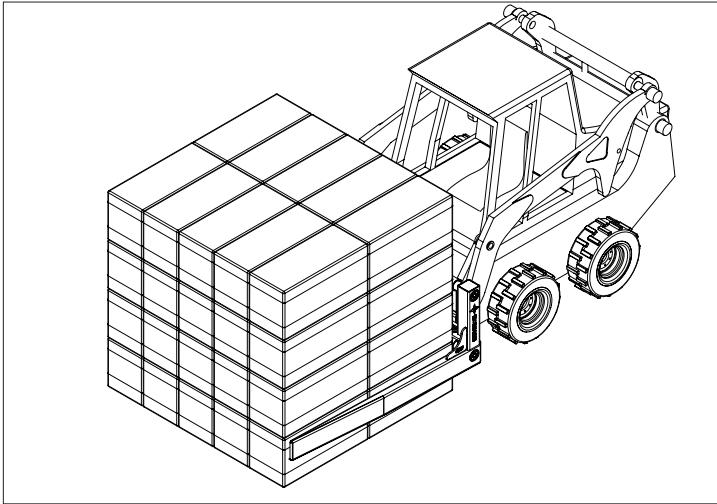
9.11 Backrest Kit, SQ Series Option #1033500



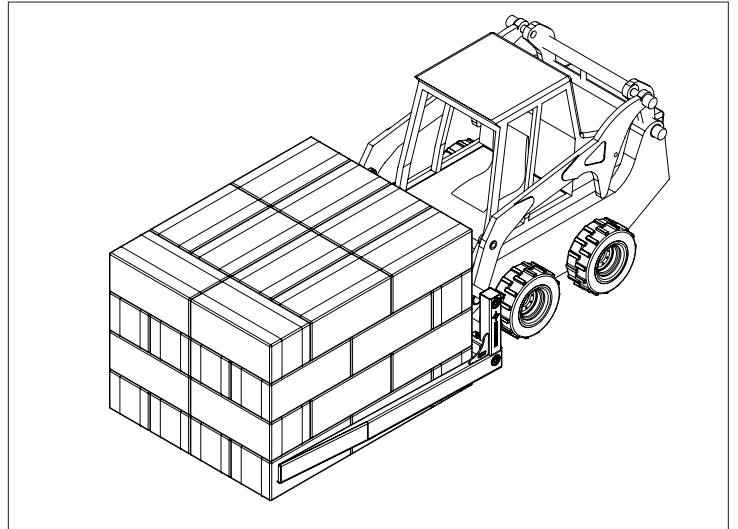
Item	Part number	Description	Quantity
1	1031880	Backrest Weldment	2
2	1006400	Hex Bolt 5/8"-11 x 1.5"	12
3	1006120	Nylock Nut 5/8"	12

10. Block of Bale Pack Diagrams

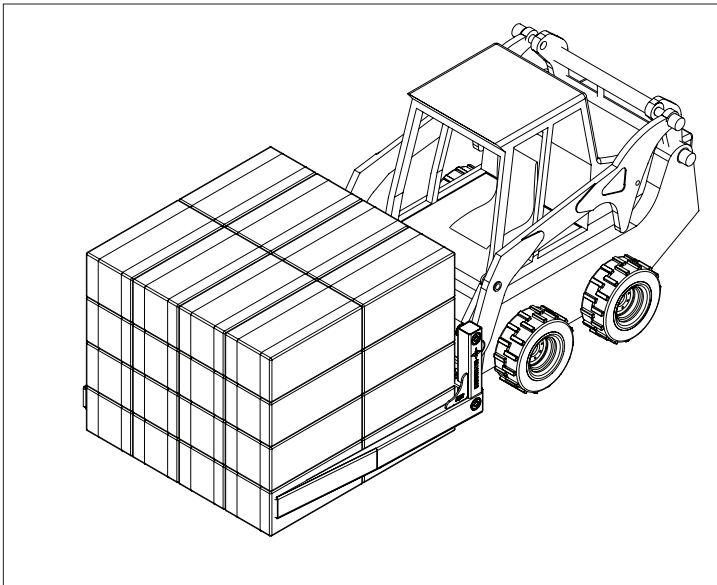
SQ72 E10



SQ90 F10



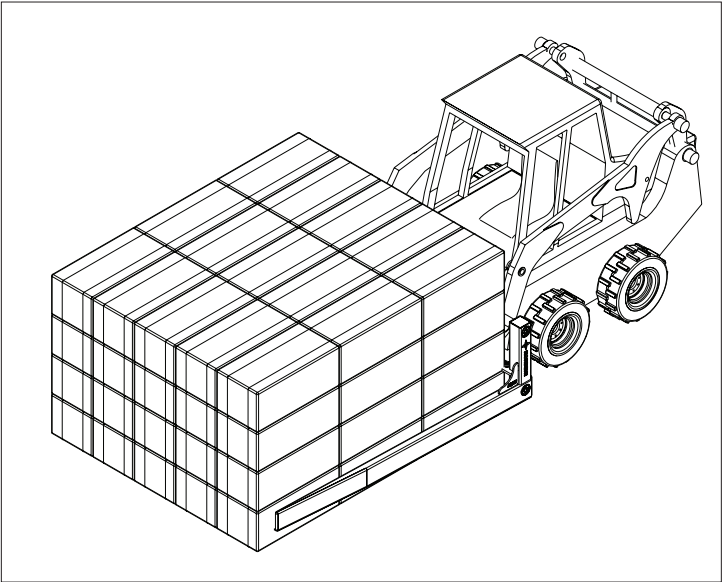
SQ72 F8



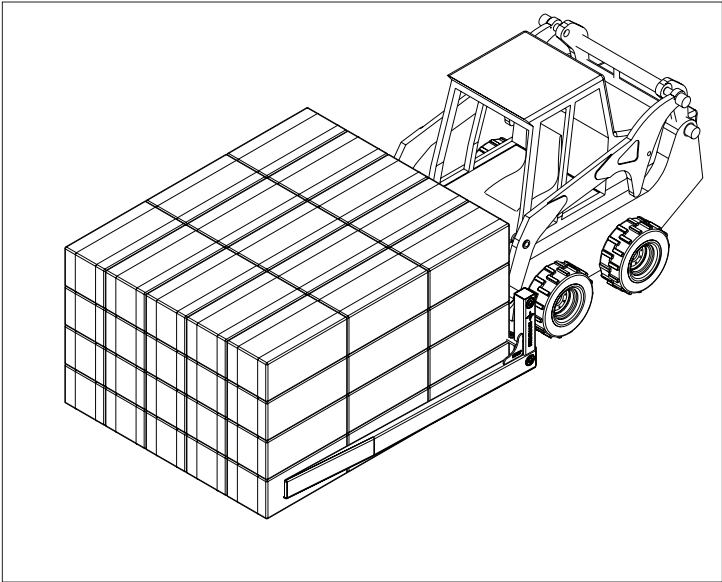
HELPFUL TIPS WHEN USING NORDEN SQUEEZE

- Each layer of the pack should be tied. (We recommend using Norden Tie Grabber)
- Squeeze bottom layer of pack keeping forks level with bales to ensure bales are properly secured in the Squeeze.
- When sliding the Squeeze into pack, keep an eye on the twine to see if the forks catch on far bales to prevent any unwanted movement.
- When lifting more than three layers of two bales each, do not over squeeze. Over-squeezing will cause center bales to shift making the pack unstable.
- When lifting packs from gravel lower forks almost to the ground. Squeeze bales then open slightly. Lower forks to the ground and re-squeeze to prevent gravel being scooped with pack.
- When moving packs, slightly tilt the Squeeze back to relieve pressure from front bales.

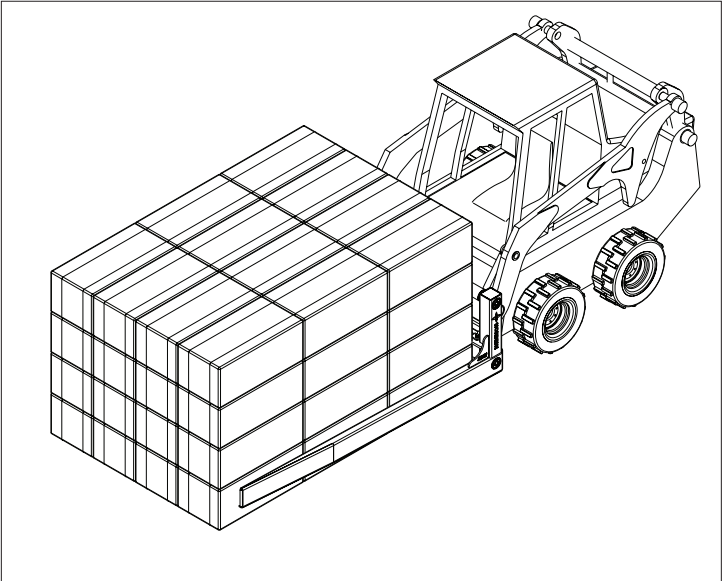
SQ102 F15



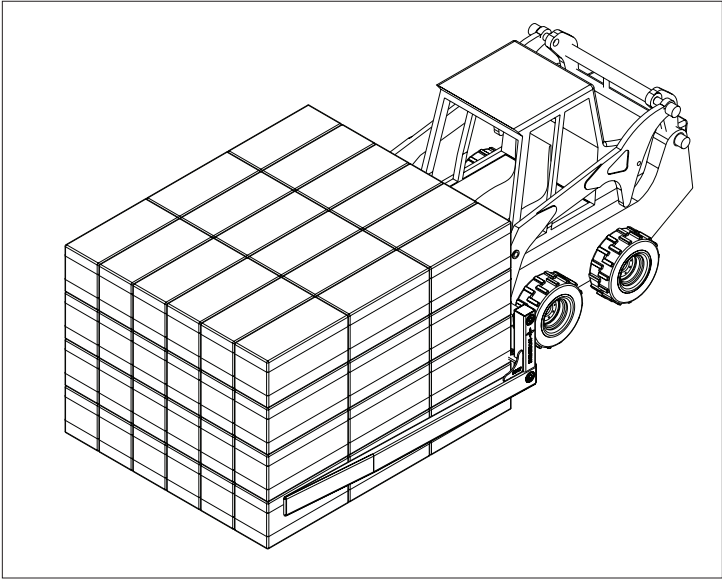
SQ102 E15



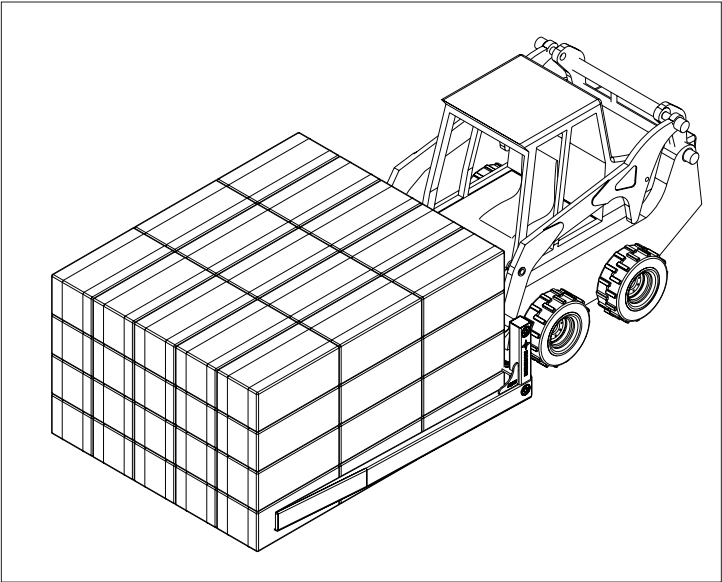
SQ102 F12



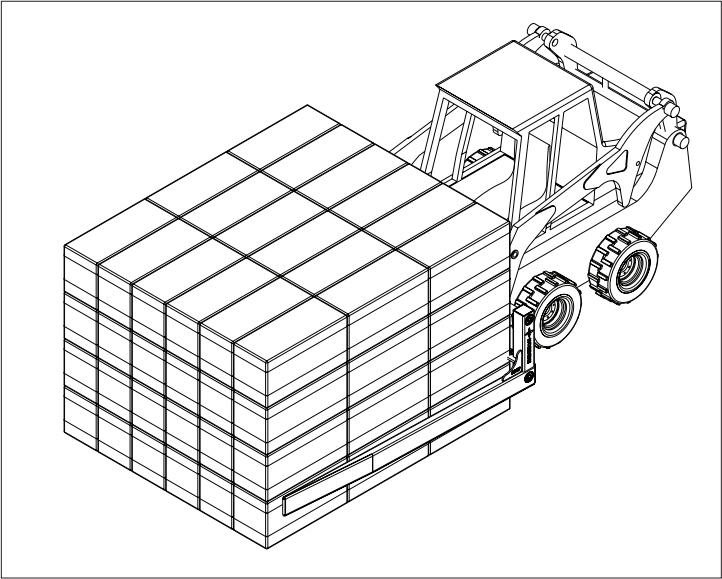
SQ102 E18



SQ102W F15



SQ102W E18





NORDEN MFG

Norden Mfg LLC
4210 Kinsman Rd NW
North Bloomfield, OH 44450

(877) 296-5851
www.nordenmfg.com
support@nordenmfg.com